

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 2

**Amendments To The Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A process for forming a polymer film on a chrome plate, comprising:  
applying an aqueous primer composition[[s]] to the chrome plate, the primer composition containing a at least one silane adhesion promoter selected from aromatic amine functional silane-coupling agents and epoxy functional silane-coupling agents;  
drying the applied primer composition;  
applying a urethane composition over the chrome plate on which the aqueous primer was applied and dried; and  
curing the urethane composition to form a polyurethane film.
2. (Original) The process of claim 1, wherein the silane adhesion promoter is an aromatic amine functional silane-coupling agent.
- 3 (Original) The process of claim 2, wherein the aromatic amine functional silane-coupling agent is N-phenyl-gamma-aminopropyltrimethoxysilane.
4. (Original) The process of claim 1, wherein the silane adhesion promoter is an epoxy functional silane-coupling agent.
5. (Original) The process of claim 4, wherein the epoxy functional silane-coupling agent is glycidoxypropylmethoxysilane.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 3

6. (Original) The process of claim 1, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of from about 0.05% to about 5% by weight.
7. (Original) The process of claim 1, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of from about 0.5% to about 2% by weight.
8. (Original) The process of claim 1, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of about 1% by weight.
9. (Original) The process of claim 1, wherein the urethane composition includes a polymethacrylate polyol.
10. (Original) The process of claim 1, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.
11. (Original) The process of claim 1, wherein the polyurethane film has a thickness of from 5-200 microns.
12. (Original) The process of claim 1, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.
13. (Previously Presented) A process for forming a polymer film on a bright metal surface selected from chrome, nickel, nickel alloys, tin, tin alloys, and stainless steel, comprising:  
applying an aqueous primer composition to the bright metal surface, the primer composition containing a silane adhesion promoter that is selected from the group consisting of aromatic amine functional silane-coupling agents and epoxy functional silane-coupling agents;  
drying the applied primer composition;

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 4

applying a urethane composition over the metal surface on which the aqueous primer was applied and dried; and

curing the urethane composition to form a polyurethane film.

14. (Original) The process of claim 13, wherein the silane adhesion promoter is gamma-glycidoxypropylmethoxysilane.

15. (Original) The process of claim 13, wherein the silane adhesion promoter is N-phenol-gamma-aminopropyltrimethoxysilane.

16. (Original) The process of claim 13, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of from about 0.05% to about 5% by weight.

17. (Original) The process of claim 13, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of from about 0.5% to about 2% by weight.

18. (Original) The process of claim 13, wherein the silane adhesion promoter is present in the aqueous primer composition in an amount of about 1% by weight.

19. (Original) The process of claim 13, wherein the urethane composition includes a polymethacrylate polyol.

20. (Original) The process of claim 13, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.

21. (Original) The process of claim 13, wherein the polyurethane film has a thickness of from 5-200 microns.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 5

22. (Original) The process of claim 13, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.

23. (Currently Amended) An article comprising:

a chrome plate;

a polyurethane film adhered to the chrome plate; and

a silane adhesion promoter enhancing adhesion between the polyurethane film and the chrome plate, the silane adhesion promoter including at least one silane adhesion promoter selected from aromatic amine functional silane-coupling agents and epoxy functional silane-coupling agents.

24. (Original) The article of claim 23, wherein the silane adhesion promoter is an aromatic amine functional silane-coupling agent.

25. (Original) The article of claim 24, wherein the aromatic amine functional silane-coupling agent is N-phenyl-gamma-aminopropyltrimethoxysilane.

26. (Original) The article of claim 23, wherein the silane adhesion promoter is an epoxy functional silane-coupling agent.

27. (Original) The article of claim 26, wherein the epoxy functional silane-coupling agent is glycidoxypropylmethoxysilane.

28. (Original) The article of claim 23, wherein the urethane composition includes a polymethacrylate polyol.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 6

29. (Original) The article of claim 23, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.
30. (Original) The process of claim 23, wherein the polyurethane film has a thickness of from 5-200 microns.
31. (Original) The process of claim 23, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.
32. (Previously Presented) An article comprising:  
a bright metal substrate selected from chrome, nickel, nickel alloys, tin, tin alloys, and stainless steel;  
a polyurethane film adhered to the metal substrate; and  
a silane adhesion promoter enhancing adhesion between the polyurethane film and the metal substrate, the silane adhesion promoter selected from the group consisting of epoxy functional silane-coupling agents and aromatic amine functional silane-coupling agents.
33. (Original) The article of claim 32, wherein the silane adhesion promoter is gamma-glycidoxypropylmethoxysilane.
34. (Original) The article of claim 32, wherein silane adhesion promoter is N-phenol-gamma-aminopropyltrimethoxysilane.
35. (Original) The article of claim 32, wherein the urethane composition includes a polymethacrylate polyol.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 7

36. (Original) The article of claim 32, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.

37. (Original) The process of claim 32, wherein the polyurethane film has a thickness of from 5-200 microns.

38. (Original) The process of claim 32, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.

39.-46.(Canceled).

47. (Currently Amended) A process for forming a polyurethane film on a chrome plate, comprising:

applying a urethane composition to the chrome plate, the urethane composition containing a at least one silane adhesion promoter selected from epoxy functional silane-coupling agents and aromatic amine functional silane-coupling agents; and  
curing the urethane composition to form a polyurethane film.

48. (Original) The process of claim 47, wherein the silane adhesion promoter is an aromatic amine functional silane-coupling agent.

49. (Original) The process of claim 48, wherein the aromatic amine functional silane-coupling agent is N-phenyl-gamma-aminopropyltrimethoxysilane.

50. (Original) The process of claim 47, wherein the silane adhesion promoter is an epoxy functional silane-coupling agent.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 8

51. (Original) The process of claim 50, wherein the epoxy functional silane-coupling agent is glycidoxypropylmethoxysilane.

52. (Original) The process of claim 47, wherein the silane adhesion promoter is present in the urethane composition in an amount of from about 0.05% to about 5% by weight.

53. (Original) The process of claim 47, wherein the silane adhesion promoter is present in the urethane composition in an amount of from about 0.5% to about 2% by weight.

54. (Original) The process of claim 47, wherein the silane adhesion promoter is present in the urethane composition in an amount of about 1% by weight.

55. (Original) The process of claim 47, wherein the urethane composition includes a polymethacrylate polyol.

56. (Original) The process of claim 47, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.

57. (Original) The process of claim 47, wherein the polyurethane film has a thickness of from 5-200 microns.

58. (Original) The process of claim 47, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.

Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 9

59. (Previously Presented) A process of forming a polymer film on a bright metal surface selected from chrome, nickel, nickel alloys, tin, tin alloys, and stainless steel, comprising:

applying a urethane composition to the metal surface, the urethane composition containing a silane adhesion promoter that is selected from the group consisting of aromatic amine functional silane-coupling agents and epoxy functional silane-coupling agents; and curing the urethane composition to form a polyurethane film.

60. (Original) The process of claim 59, wherein the silane adhesion promoter is gamma-glycidoxypolypropylmethoxysilane.

61. (Original) The process of claim 59, wherein the silane adhesion promoter is N-phenol-gamma-aminopropyltrimethoxysilane.

62. (Original) The process of claim 59, wherein the silane adhesion promoter is present in the urethane composition in an amount of from about 0.05% to about 5% by weight.

63. (Original) The process of claim 59, wherein the silane adhesion promoter is present in the urethane composition in an amount of from about 0.05% to about 2% by weight.

64. (Original) The process of claim 59, wherein the silane adhesion promoter is present in the urethane composition in an amount of about 1% by weight.

65. (Original) The process of claim 59, wherein the urethane composition includes a polymethacrylate polyol.

66. (Original) The process of claim 59, wherein the urethane composition further comprises a colorant in an amount effective to impart a desired color, tint or hue to the chrome plate.



Applicant : Qihua Xu  
Appln. No. : 09/707,866  
Page : 10

67. (Original) The process of claim 59, wherein the polyurethane film has a thickness of from 5-200 microns.

68. (Original) The process of claim 59, wherein the polyurethane film has a pencil hardness of from about 3H to 6H.

69. (Currently Amended) A process for imparting a color to a lustrous, bright metal surface without obscuring the brightness and luster of the metal surface, comprising:

providing a bright, lustrous metal surface selected from chrome, nickel, nickel alloys, tin, tin alloys and stainless steel;

applying a an aqueous primer composition to the metal surface, the primer composition containing a silane adhesion promoter selected from aromatic amine functional silane-coupling agents and epoxy functional silane coupling agents;

drying the applied primer composition;

applying a urethane composition over the metal surface on which the aqueous primer composition was applied and dried; and

curing the urethane composition to form a polyurethane film.